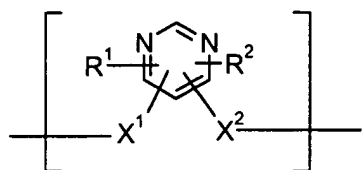


In the claims:

**1. (withdrawn / currently amended):** A polymer comprising a repeating unit of the formula

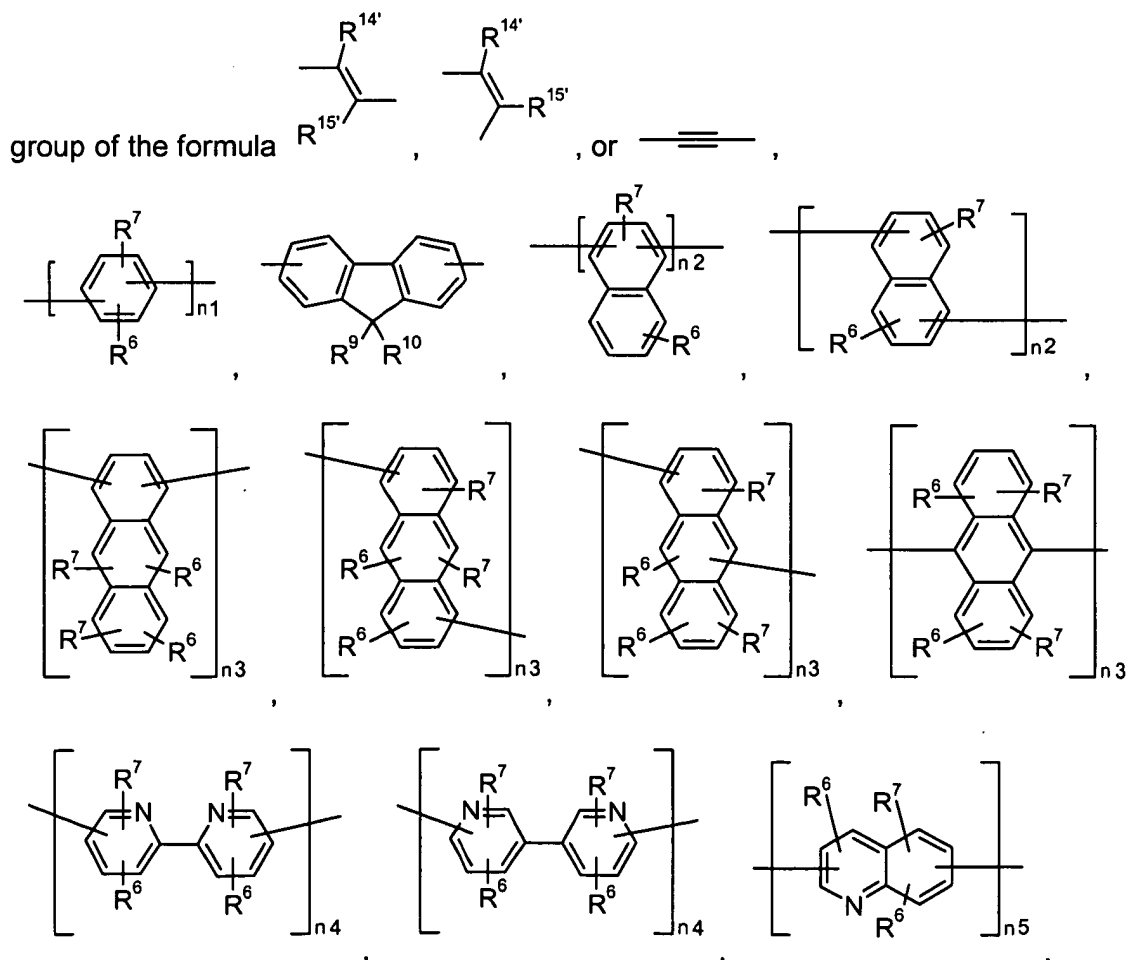


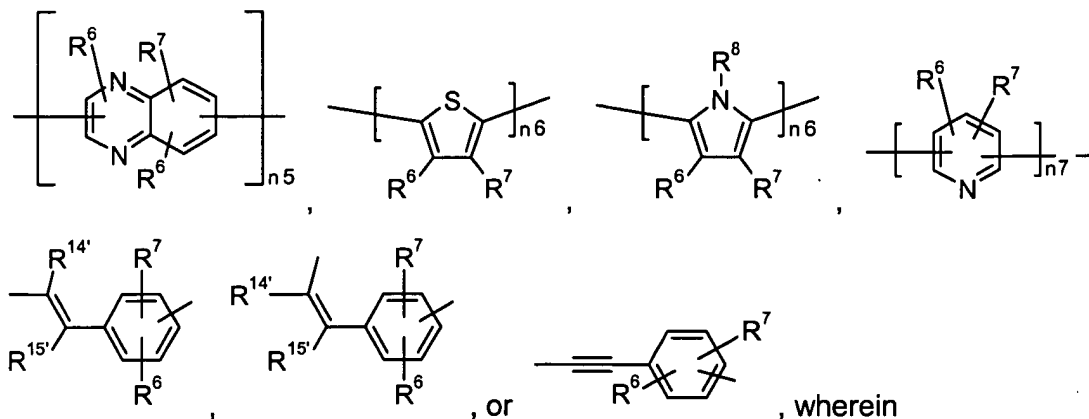
(I); wherein

$R^1$  and  $R^2$  are independently of each other an organic substituent, is  $C_{6-24}$  aryl or  $C_{2-20}$  heteroaryl each of which optionally can be substituted, and  $R^2$  is H,

$X^1$  and  $X^2$  are independently of each other a divalent linking group.

**2. (withdrawn)** A polymer according to claim 1, wherein  $X^1$  and  $X^2$  are independently of each other a





$n_1, n_2, n_3, n_4, n_5, n_6$  and  $n_7$  are integers of 1 to 10,  $R^6$  and  $R^7$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_5$ - $C_{12}$ cycloalkyl,  $C_5$ - $C_{12}$ cycloalkyl, which is substituted by E,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{18}$ alkenyl,  $C_2$ - $C_{18}$ alkynyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkoxy which is substituted by E and/or interrupted by D,  $C_7$ - $C_{25}$ aralkyl, or  $-CO-R^{28}$ ,

$R^8$  is  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$  aryl, or  $C_7$ - $C_{25}$ aralkyl,

$R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{18}$ alkenyl,  $C_2$ - $C_{18}$ alkynyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkoxy which is substituted by E and/or interrupted by D, or  $C_7$ - $C_{25}$ aralkyl, or

$R^9$  and  $R^{10}$  form a ring, which may optionally be substituted by  $R^6$ ,

$R^{14'}$  and  $R^{15'}$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl, or  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,

D is  $-CO-$ ,  $-COO-$ ,  $-S-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-O-$ ,  $-NR^{25}-$ ,  $-SiR^{30}R^{31}-$ ,  $-POR^{32}-$ ,  $-CR^{23}=CR^{24}-$ , or  $-C\equiv C-$ , and E is  $-OR^{29}$ ,  $-SR^{29}$ ,  $-NR^{25}R^{26}$ ,  $-COR^{28}$ ,  $-COOR^{27}$ ,  $-CONR^{25}R^{26}$ ,  $-CN$ ,  $-OCOOR^{27}$ , or halogen,

wherein

$R^{23}$ ,  $R^{24}$ ,  $R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkyl which is interrupted by  $-O-$ , or

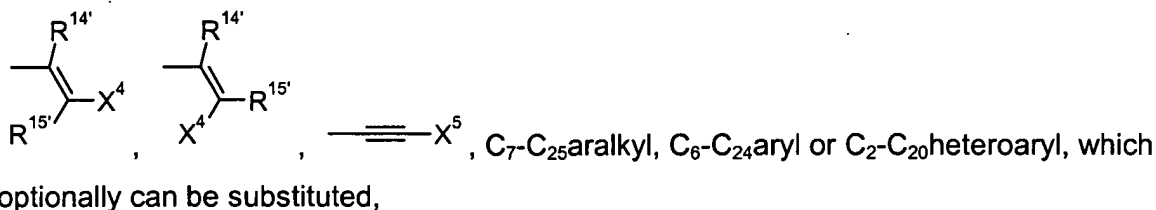
$R^{25}$  and  $R^{26}$  together form a five or six membered ring,  $R^{27}$  and  $R^{28}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkyl which is interrupted by  $-O-$ ,

R<sup>29</sup> is H, C<sub>6</sub>-C<sub>18</sub>aryl, C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>1</sub>-C<sub>18</sub>alkyl, or C<sub>1</sub>-C<sub>18</sub>alkyl which is interrupted by -O-,

R<sup>30</sup> and R<sup>31</sup> are independently of each other C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>6</sub>-C<sub>18</sub>aryl, or C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>18</sub>alkyl, and

R<sup>32</sup> is C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>6</sub>-C<sub>18</sub>aryl, or C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>18</sub>alkyl.

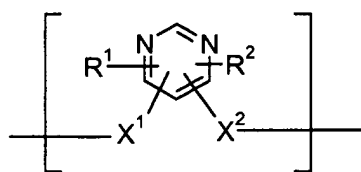
3. **(withdrawn)** A polymer according to claim 2, wherein R<sup>1</sup> and R<sup>2</sup> are independently of each other H, C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>1</sub>-C<sub>18</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>2</sub>-C<sub>18</sub>alkenyl, C<sub>2</sub>-C<sub>18</sub>alkynyl, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>1</sub>-C<sub>18</sub>alkoxy which is substituted by E and/or interrupted by D,



X<sup>4</sup> is C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>1</sub>-C<sub>18</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, which optionally can be substituted,

X<sup>5</sup> is C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl substituted by -OC<sub>1</sub>-C<sub>18</sub>alkyl or -OC<sub>6</sub>-C<sub>24</sub>aryl.

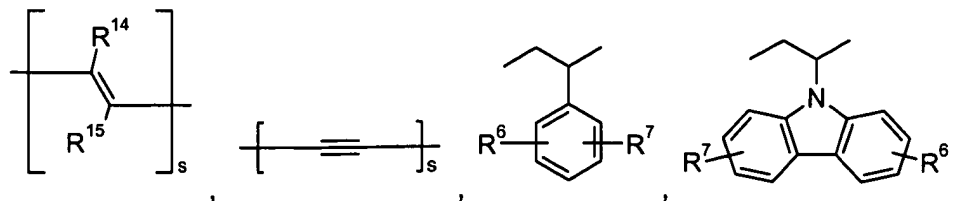
4. **(currently amended)** A polymer according to claim 1, comprising a repeating unit of the formula

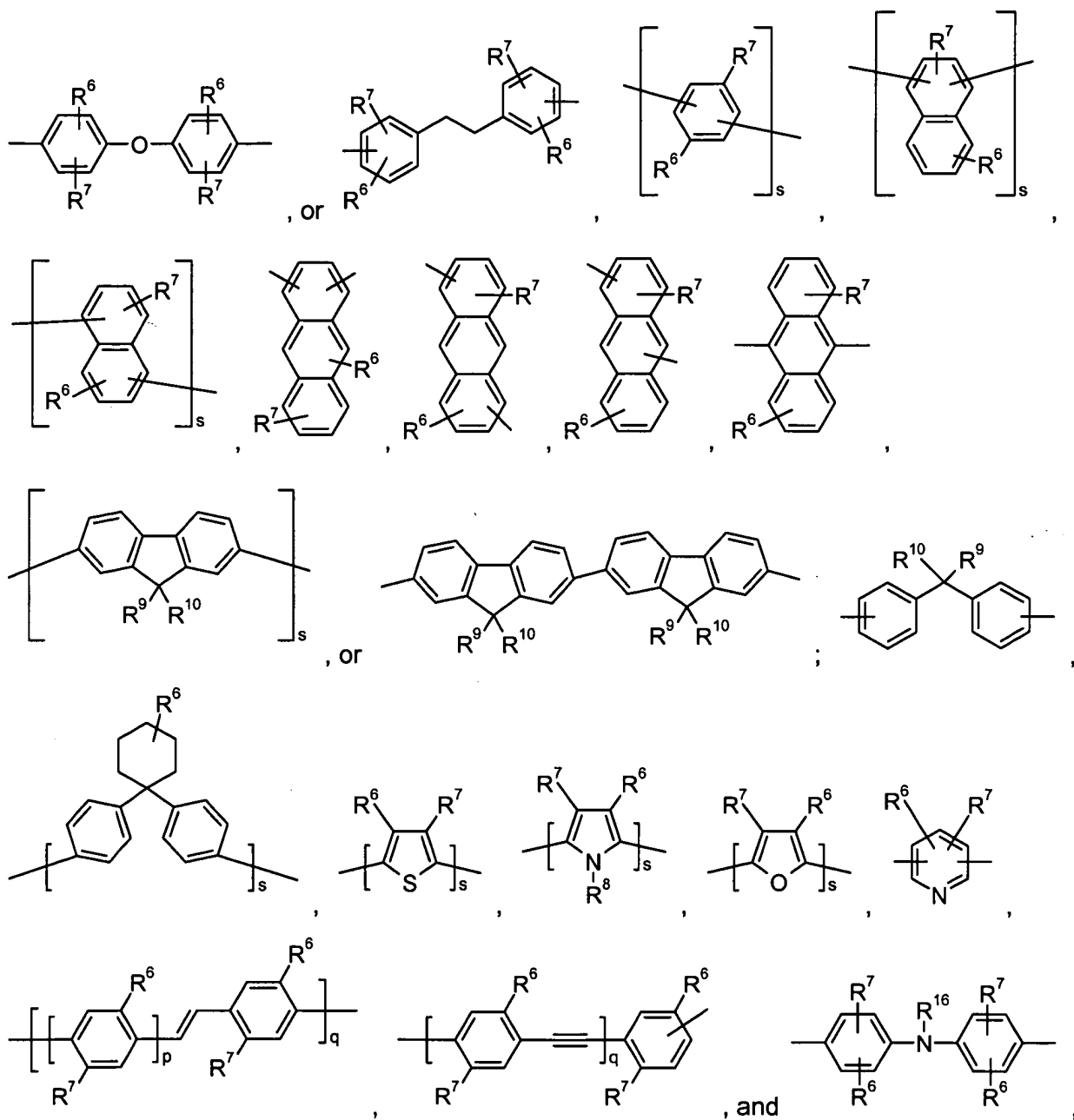


(I); wherein

R<sup>1</sup> and R<sup>2</sup>, are independently of each other an organic substituent, is C<sub>6-24</sub>aryl or C<sub>2-20</sub>heteroaryl each of which optionally can be substituted, and R<sup>2</sup> is H,

X<sup>1</sup> and X<sup>2</sup> are independently of each other a divalent linking group which co-polymer also comprises comprising a co-monomer T which is selected from the group consisting of





wherein

$R^{16}$  is H,  $C_6-C_{18}$ aryl,  $C_6-C_{18}$ aryl which is substituted by  $C_1-C_{18}$ alkyl,  $C_1-C_{18}$ alkyl,  $C_7-C_{25}$ aralkyl, or  $C_1-C_{18}$ alkyl which is interrupted by  $-O-$ ,

$p$  is an integer from 1 to 10,

$q$  is an integer from 1 to 10,

$s$  is an integer from 1 to 10,

$R^6$  and  $R^7$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_5$ - $C_{12}$ cycloalkyl,  $C_5$ - $C_{12}$ cycloalkyl, which is substituted by E,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{18}$ alkenyl,  $C_2$ - $C_{18}$ alkynyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkoxy which is substituted by E and/or interrupted by D,  $C_7$ - $C_{25}$ aralkyl, or  $-CO-R^{28}$ ,

$R^8$  is  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$  aryl, or  $C_7$ - $C_{25}$ aralkyl,

$R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{18}$ alkenyl,  $C_2$ - $C_{18}$ alkynyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkoxy which is substituted by E and/or interrupted by D, or  $C_7$ - $C_{25}$ aralkyl, or

$R^9$  and  $R^{10}$  form a five- or six-membered ring, which may optionally be substituted by  $R^6$ ,

$R^{14'}$  and  $R^{15'}$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl, or  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,

D is  $-CO-$ ,  $-COO-$ ,  $-S-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-O-$ ,  $-NR^{25}-$ ,  $-SiR^{30}R^{31}-$ ,  $-POR^{32}-$ ,  $-CR^{23}=CR^{24}-$ , or  $-C\equiv C-$ , and E is  $-OR^{29}$ ,  $-SR^{29}$ ,  $-NR^{25}R^{26}$ ,  $-COR^{28}$ ,  $-COOR^{27}$ ,  $-CONR^{25}R^{26}$ ,  $-CN$ ,  $-OCOOR^{27}$ , or halogen, wherein

$R^{23}$ ,  $R^{24}$ ,  $R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkyl which is interrupted by  $-O-$ , or

$R^{25}$  and  $R^{26}$  together form a five or six membered ring,  $R^{27}$  and  $R^{28}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkyl which is interrupted by  $-O-$ ,

$R^{29}$  is H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkyl, or  $C_1$ - $C_{18}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1$ - $C_{18}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{18}$ alkyl, and

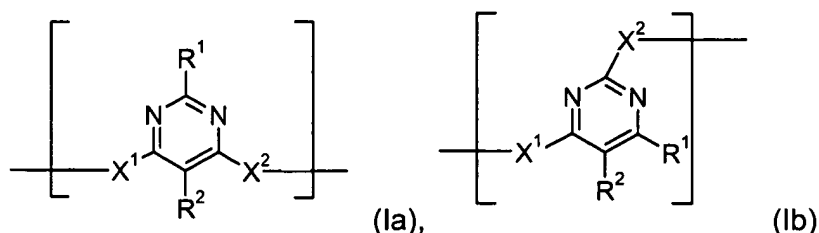
$R^{32}$  is  $C_1$ - $C_{18}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{18}$ alkyl, or

$R^9$  and  $R^{10}$  together form a group of formula  $=CR^{100}R^{101}$ , wherein

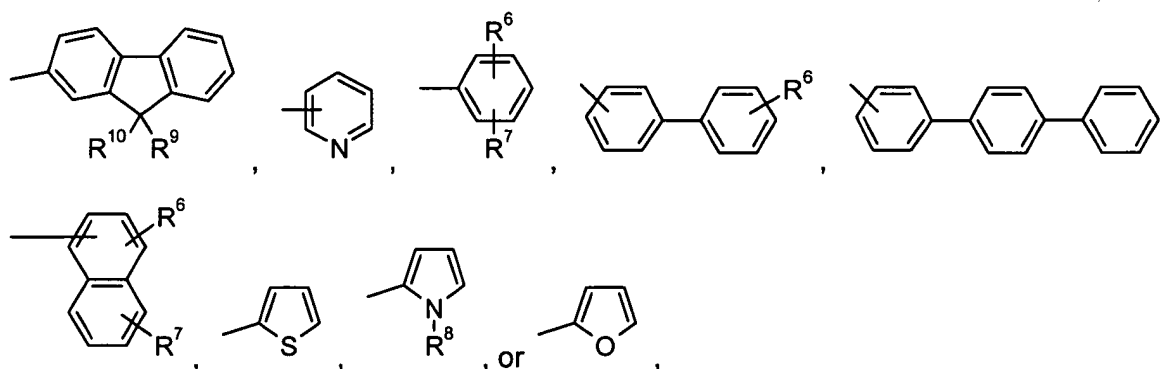
$R^{100}$  and  $R^{101}$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E, or  $C_2$ - $C_{20}$ heteroaryl, or  $C_2$ - $C_{20}$ heteroaryl which is substituted by E, and

$R^{14}$  and  $R^{15}$  are independently of each other H,  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E, or  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E.

**5. (withdrawn)** A polymer according to claim 1, comprising repeating units of formula Ia or Ib,



wherein  $R^1$  is a group of formula



wherein  $R^2$  is H,

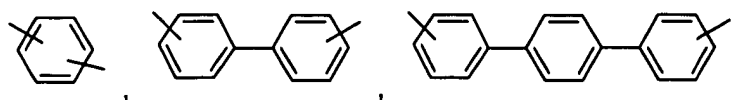
$R^6$  and  $R^7$  are independently of each other H,  $C_1$ - $C_{12}$ alkyl,  $C_5$ - $C_{12}$ cycloalkyl,  $C_6$ - $C_{24}$ aryl, which can be substituted by  $-O$ - $C_1$ - $C_{12}$ alkyl, or  $C_1$ - $C_{18}$ alkoxy,

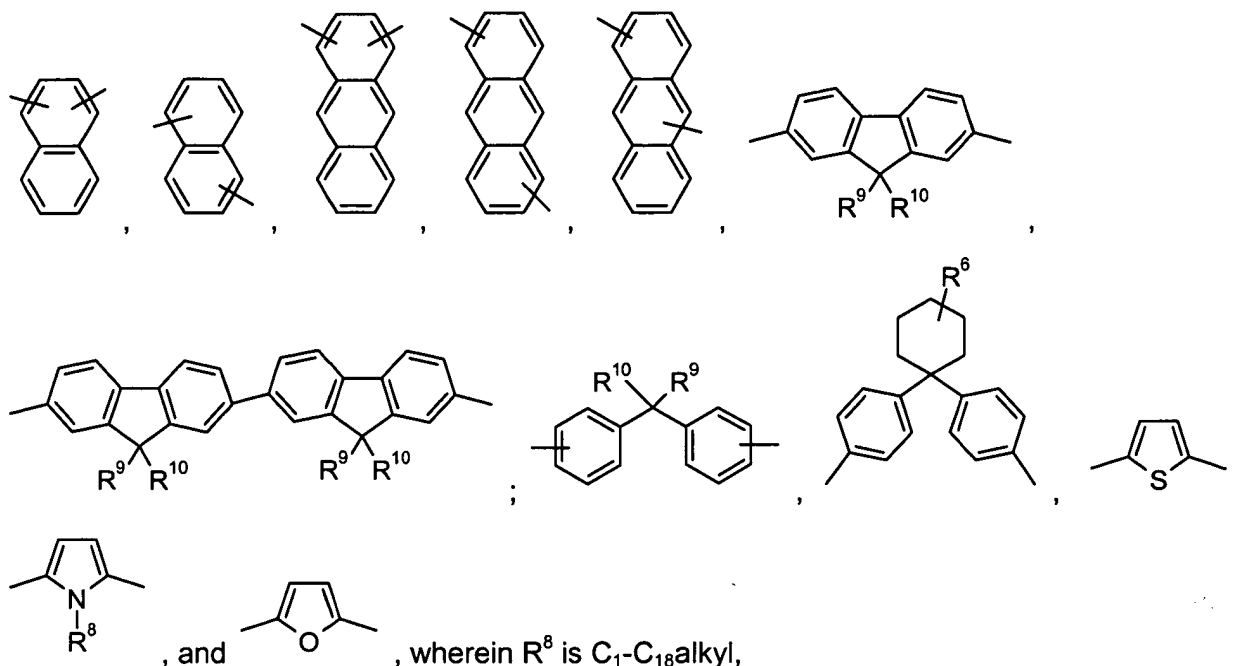
$R^8$  is  $C_1$ - $C_{18}$ alkyl,  $C_1$ - $C_{18}$ alkyl interrupted by one or two oxygen atoms, or  $C_6$ - $C_{12}$ aryl, which optionally can be substituted by  $C_1$ - $C_{12}$ alkyl, or  $C_1$ - $C_{12}$ alkoxy,

$R^9$  and  $R^{10}$  are independently of each other H,  $C_1$ - $C_{12}$ alkyl, or  $C_1$ - $C_{12}$ alkoxy,

$R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{18}$ alkyl, especially  $C_4$ - $C_{12}$ alkyl, which can be interrupted by one or two oxygen atoms.

**6.(currently amended)** A polymer according to claim [5] 4, comprising a co-monomer T which is selected from the group consisting of

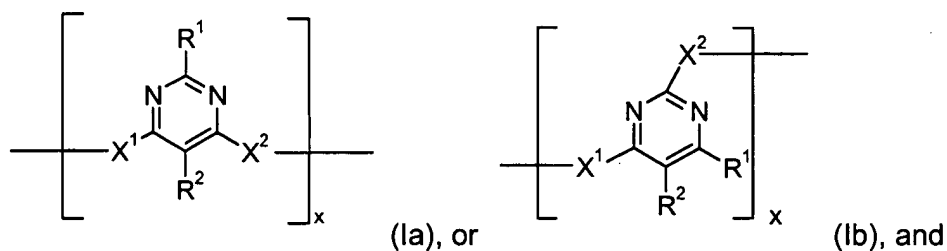




$R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{18}$ alkyl, which can be interrupted by one or two oxygen atoms, or

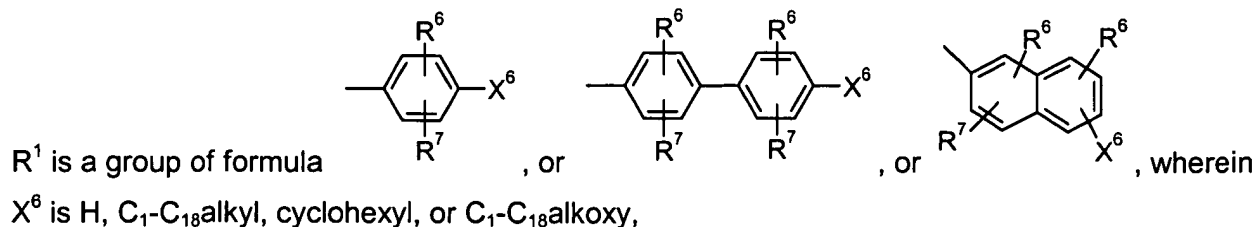
$R^9$  and  $R^{10}$  form a five or six membered carbocyclic ring, which optionally can be substituted by  $C_1$ - $C_8$ alkyl.

**7. (currently amended)** A polymer according to claim [[1]] 4, comprising a repeating unit of formula



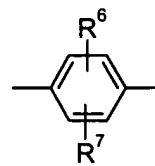
a co-monomer  $\left[ T \right]_y$ , wherein

$x$  is in the range of 0.005 to 1, and  $y$  is in the range of 0.995 to 0, wherein the sum of  $x$  and  $y$  is 1,

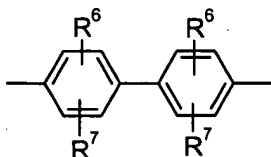


R<sup>2</sup> is H,

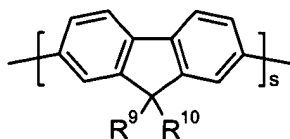
X<sup>1</sup> and X<sup>2</sup> are independently of each other a group of formula

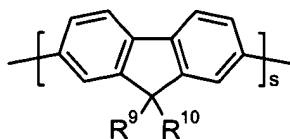


, or



, and



T is a group of formula , wherein s is one or two, and R<sup>9</sup> and R<sup>10</sup> are independently of each other C<sub>1</sub>-C<sub>18</sub>alkyl, which can be interrupted by one or two oxygen atoms, and

R<sup>6</sup> and R<sup>7</sup> are independently of each other H, C<sub>1</sub>-C<sub>12</sub>alkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>6</sub>-C<sub>24</sub>aryl, which can be substituted by -O-C<sub>1</sub>-C<sub>12</sub>alkyl, or C<sub>1</sub>-C<sub>18</sub>alkoxy.

**8-11. (cancelled)**

**12. (withdrawn)** An optical device or a component therefore, comprising a substrate and a polymer according to claim 1.

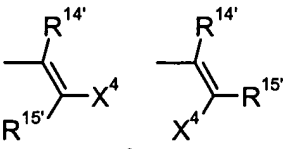
**13. (withdrawn)** An optical device according to claim 12, wherein the optical device comprises an electroluminescent device.

**14. (withdrawn)** An optical device according to claim 13, wherein the electroluminescent device comprises

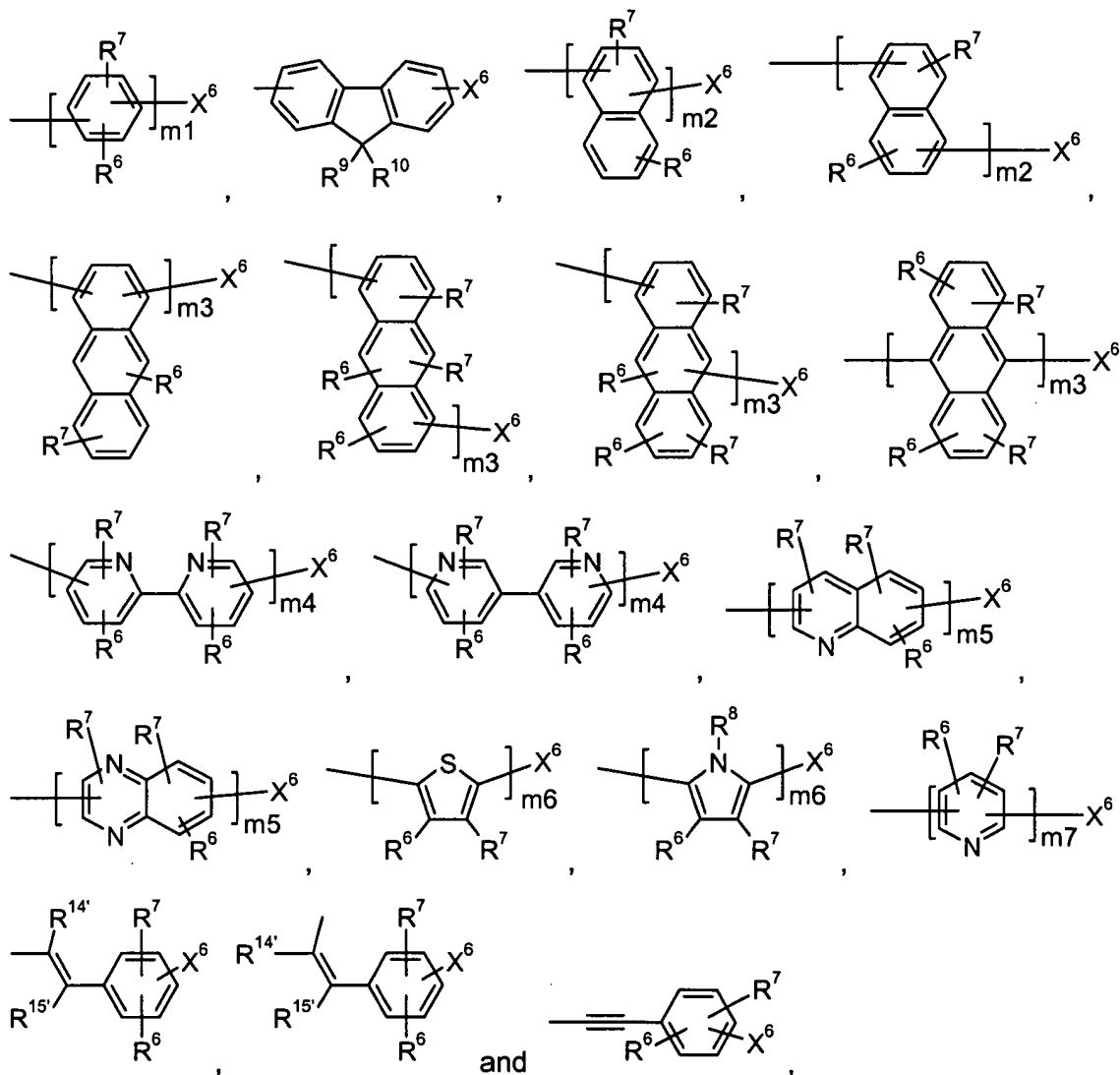
- (a) a charge injecting layer for injecting positive charge carriers,
- (b) a charge injecting layer for injecting negative charge carriers,
- (c) a light-emissive layer located between the layers (a) and (b) comprising a polymer according to claim 1.

**15. (cancelled)**



16. (withdrawn) A polymer according to claim 3, wherein when R<sup>1</sup> or R<sup>2</sup> is ,

$\text{---}\equiv\text{X}^5$ , C<sub>6</sub>-C<sub>24</sub>aryl or C<sub>2</sub>-C<sub>20</sub>heteroaryl, it is selected from the group consisting of the formulae

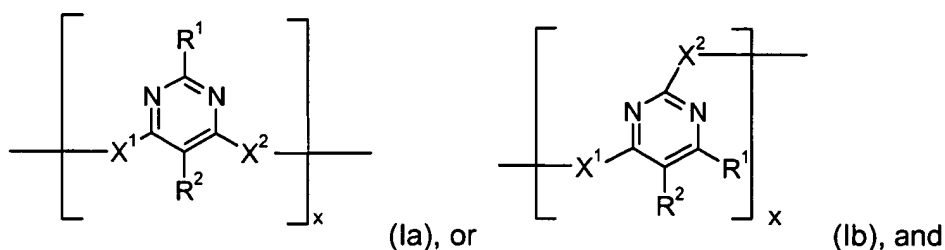


wherein m1, m2, m3, m4, m5, m6 and m7 are integers of 1 to 10,

X<sup>6</sup> is H, C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>1</sub>-C<sub>18</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>30</sub>aryl, which optionally can be substituted, C<sub>2</sub>-C<sub>26</sub>heteroaryl, which optionally can be substituted, C<sub>2</sub>-C<sub>18</sub>alkenyl, C<sub>2</sub>-C<sub>18</sub>alkynyl, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>1</sub>-C<sub>18</sub>alkoxy which is substituted by E and/or interrupted by D, or C<sub>7</sub>-C<sub>25</sub>aralkyl,

$R^{11}$ ,  $R^{12}$  and  $R^{13}$  are independently of each other H,  $C_1$ - $C_{18}$  alkyl,  $C_1$ - $C_{18}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{18}$ alkenyl,  $C_2$ - $C_{18}$ alkynyl,  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkoxy which is substituted by E and/or interrupted by D, or  $C_7$ - $C_{25}$ aralkyl.

**17. (previously presented)** A polymer according to claim 7, comprising a repeating unit of formula



a co-monomer  $\left[ \text{T} \right]_y$ , wherein

x is in the range of 0.4 to 0.6, and y is in the range of 0.6 to 0.4, wherein the sum of x and y is 1.

**18. (cancelled)**

**19-21. (cancelled)**